



DEPARTMENT OF VETERANS AFFAIRS
Veterans Health Administration
Washington, DC 20420

IL 10-2008-006

In Reply Refer To: 111

March 11, 2008

UNDER SECRETARY FOR HEALTH'S INFORMATION LETTER

BODY PIERCING AND TATTOOS

1. Purpose. This Veterans Health Administration Information Letter provides clinicians with information regarding the possible rare occurrence of bacterial infection as a result of recent body piercings and tattoos.

2. Background

a. The Office of the Medical Inspector (OMI) for the Department of Veterans Affairs (VA) recently investigated the medical care of a veteran who developed an infection from which *staphylococcus aureus* was isolated about 22 months after a cranial implant was placed. The findings of the OMI did not indicate that a surgical site infection occurred, but noted a possible association between recent piercing and tattooing which had occurred as recently as between 3 months and 10-days prior to the diagnosis of cranial implant-associated infection. A recommendation was made that this possible association of piercing and tattooing be communicated to frontline practitioners to make them aware of this possible rare occurrence.

b. The medical literature contains scattered reports of association of piercing and tattooing with the subsequent development of bacterial infection. Little prospective research exists about this topic area, but some reports note up to 30 percent of persons receiving piercing will develop signs and symptoms of infection. The vast majority of persons with these infection signs and symptoms have occurrences at the location of the piercing; many only require local care without the use of antibiotic therapy for resolution. It is thought that the vast majority of the infectious diseases agents associated with local occurrence are those typically considered to be normal flora at the site (e.g., piercing and tattoos on skin would be found to have staphylococci, streptococci and skin flora, whereas piercing of the lips, cheeks or tongue would be found to have a stronger association with oral flora). However, no epidemiologic data have been systematically evaluated for serious, deep-seated infections associated with piercing or tattooing to determine occurrence, prevalence, or incidence, although these are all suspected to be relatively low.

c. Reports of infections at sites remote from the location of piercing or tattooing are also scarce, especially without signs or symptoms consistent with infection at the local site; and for

those few reports, the majority seem to be associated with oral piercing. Some of the associated infections noted in those reports include endocarditis and possible prosthetic joint involvement.

(1) A search of MEDLINE revealed no reports of piercing and tattooing with development of infection at the site of a cranial implant.

(2) Reports in the literature suggest that the rate of piercing and tattooing is increasing in the general population in the United States.

(3) Many experts feel that as tattooing and body piercings increase, an increase in the number (but not necessarily the rate) of infections associated with these practices will occur. If this is the case, it could reasonably follow that serious infections such as endocarditis or involvement of prosthetics would also increase in number. However, there are no controlled trials or studies that would support a blanket recommendation at this time for antibiotic prophylaxis at the time of piercing or tattooing in persons with prostheses or implants.

d. Transmission of viral infections by tattooing and body piercing has been better studied; a transmission of viral agents such as hepatitis B, hepatitis C, and human immunodeficiency virus (HIV) has been associated with these procedures. However, these infections are more systemic in nature and do not manifest as an association of an interaction between piercing and tattooing and biomechanical implants and prosthetics.

3. Recommendations

a. Veterans with implanted prosthetics of any type (e.g., heart valves, cranial implants, artificial hips, etc.) need to be counseled regarding the:

(1) Possible risk of infection at the implanted prosthetic site that may occur from receiving a new tattoo or body piercing; and

(2) General risk of local bacterial infection associated with piercing or tattooing, as well as the possibility of serious viral infections.

b. Despite an increased risk of infection associated with tattoos and body piercings, the current level of scientific evidence does not support routine antibiotic prophylaxis prior to tattooing or body piercing, even in persons with implanted prosthetics.

c. All veterans who make clear their intention to get new tattoos or body piercings, after receiving counseling regarding these infectious risks, need to be counseled to only patronize licensed establishments where sterile single-use, disposable needles are used for these procedures.

d. Documentation regarding any counseling needs to be noted in the patient's medical record.

4. Inquiries. Clinical questions regarding this information letter may be addressed to Infectious Diseases Program, within the Office of Patient Care Services at (513) 475-6398.

5. References. The following are key references used in the development of this Information Letter. A more complete bibliography of references reviewed for this information letter may be obtained by contacting the Infectious Diseases Program Office in Patient Care Services at (513) 475-6398.

a. Armstrong ML, Koch JR, Saunders JC, et al. "The Hole Picture: Risks, Decision Making, Purpose, Regulations, and the Future of Body Piercing." Clinics in Dermatology 2007;25:398-406.

b. Lee S-H, Chung M-H, Lee J-S, et al. "A Case of Staphylococcus aureus Endocarditis after Ear Piercing in a Patient with Normal Cardiac Valve and Questionnaire Survey on Adverse Events of Body Piercing in College Students of Korea." Scandinavian Journal of Infectious Diseases. 2006;38:130-132.

c.. Metzler DI, "Complications of Body Piercing." American Family Physician. 2005;72(10):2029-2034.

d. Millar BC, Moore JE. "Antibiotic Prophylaxis, Body Piercing and Infective Endocarditis" Journal of Antimicrobial Chemotherapy. 2004;53:123-126.

e. Wilson W, Taubert KA, Gewitz, et al. "Prevention of Infective Endocarditis: Guidelines from the American Heart Association." Circulation. 2007;116:1736-1754.

f. Health Canada "Infection Control Guidelines—Infection Prevention and Control Practices for Personal Services: Tattooing, Ear/Body Piercing, and Electrolysis." Canada Communicable Disease Report Supplement. July 1999;Volume 25S3

g. Dutando Soriano A, Galindo Moreno P. "Antibiotic Prophylaxis in Dental Patients with Body Prostheses." Medicina Oral. 2002;7:353-359.

Michael J. Kussman, MD, MS, MACP
Under Secretary for Health

DISTRIBUTION: CO: E-Mailed 3/12/08
FLD: VISN, MA, DO, OC, OCRO, and 200 – E-Mailed 3/12/08